MP MASTER
MA36345

AEPD-4594-O (CE1842A)

MOTOROLA

DESK STAND MICROPHONE

MODELS TMN6016A AND TMN6017A

The Model TMN6017A is a dynamic, semi-directional, moving coil type, desk stand microphone with an impedance matching transformer. The MONITOR and TRANSMIT switches are interlocked to make it impossible to transmit before monitoring.

NOTE

A terminal bracket assembly is included with the TMN6016A Microphone for installation in the "Compa-Station" Base Station.

1. DESCRIPTION

The Motorola Model TMN6016A is a dynamic, uni-directional, desk stand microphone. It has a two-stage transistorized amplifier, a MONITOR switch and a TRANSMIT switch. To make it impossible to transmit before channel monitoring, a jumper wire must be removed. (Refer to Schematic Diagram 63B81102A96.) The removal of the jumper wire will interlock the TRANSMIT switch and the MONITOR switch. This interlocking necessitates pressing the MONITOR switch before the TRANSMIT switch can be used to excite the transmitter.

2. INSTALLATION

a. Model TMN6016A Microphone

(1) Plug the microphone connector into the MICROPHONE receptacle.

(2) To prevent transmitting before channel monitoring, remove jumper wire as shown on Schematic Diagram 63B81102A96.

(3) Connect the lug termination cord as indicated in the following table:

MODEL TABLE

MODEL	DESCRIPTION	APPLICATION
TMN6016A	With Preamplifier	Consolette, Desk Stand (BY) and "Compa-Station" Base Stations.
TMN6017A	Without Preamplifier	Remote Controlled Base Station (T1204A, T1207A or TA270 Series Remote Control Console)

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Issue - A

* NOTE ... WAS ADDED AS FOLLOWS: RED TO "A" WHT TO "B" GRN TO "D" BLK TO "E"

INSTALLATION OF TMN6016A LUG TERMINATION CORD

STEP	POWER SUPPLY IN DESK TOP (BY) AND "COMPA-STATION" BASE STATIONS	CONSOLETTE BASE STATIONS
1	Disconnect cabinet "Private-Line" switch lead from terminal 20 of the power supply terminal board.	Disconnect jumper between terminals 9 and 10 of terminal board on rear panel.
2	Install off-set bracket on terminal 20 (Refer to Terminal Bracket Assembly Diagram).	*Connect the RED spade lug to terminal 9.
3	Connect RED spade-lug lead to base of bracket.	*Connect the WHITE spade lug to terminal 10.
4	Connect cabinet "Private-Line" switch and WHITE spade-lug leads to insulated part of bracket.	*Insulate BLACK spade lug. This lug is not connected.
5	Insulate BLACK spade-lug leads. This lug is not connected.	*Connect green lead to terminal 5 (GROUND)
6	Connect green lead to terminal 11, 17 or ground.	

b. Model TMN6017A Microphone

(1) Plug the connector into the MICROPHONE plug located on the amplifier section in the rear of the console chassis.

(2) Connect the lug termination cord of TB2 of T1204A, T1207A or TA270 Series Remote Control Console as indicated in the following table:

INSTALLATION OF TMN6017A LUG TERMINATION CORD

STEP	PROCEDURE
1	Connect RED spade-lug lead to terminal 18 at rear of chassis.
2	Connect BLACK spade-lug lead to terminal 23.
3	Connect GREEN spade-lug lead to terminal 24.
4	Insulate WHITE spade-lug lead. This lead is not connected.

3. SERVICE NOTES

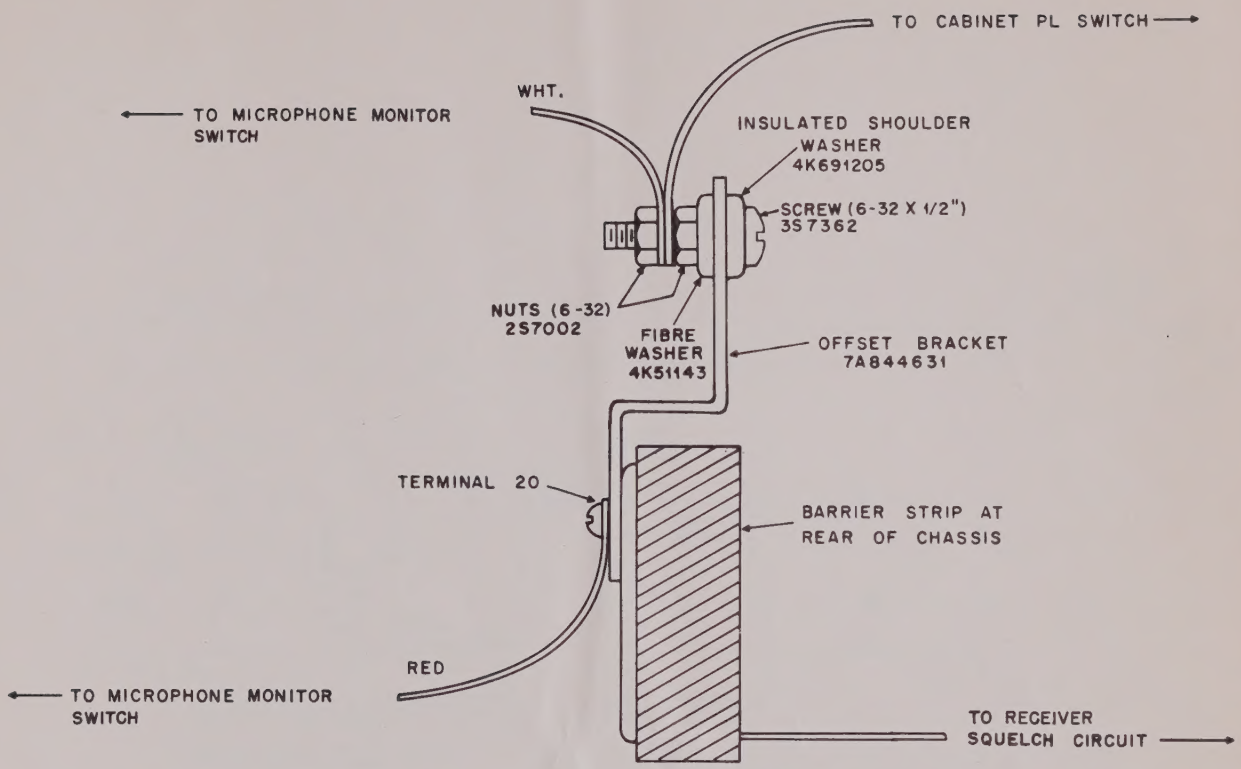
When connecting the TMN6017A Microphone to models of the TA270 Series Remote Control Consoles which have no provisions for "Private-Line" disabling, it is necessary to make the following connections in the remote control console:

One resistor is added between terminals 5 and 17 of TB-1; the other is added between terminals 6 and 19. Both resistors are 12,000 ohm ±5%, 1/2 W (Motorola Part 6R2075). Jumper JU-12 is added between terminals 10 and 12 of TB-1.

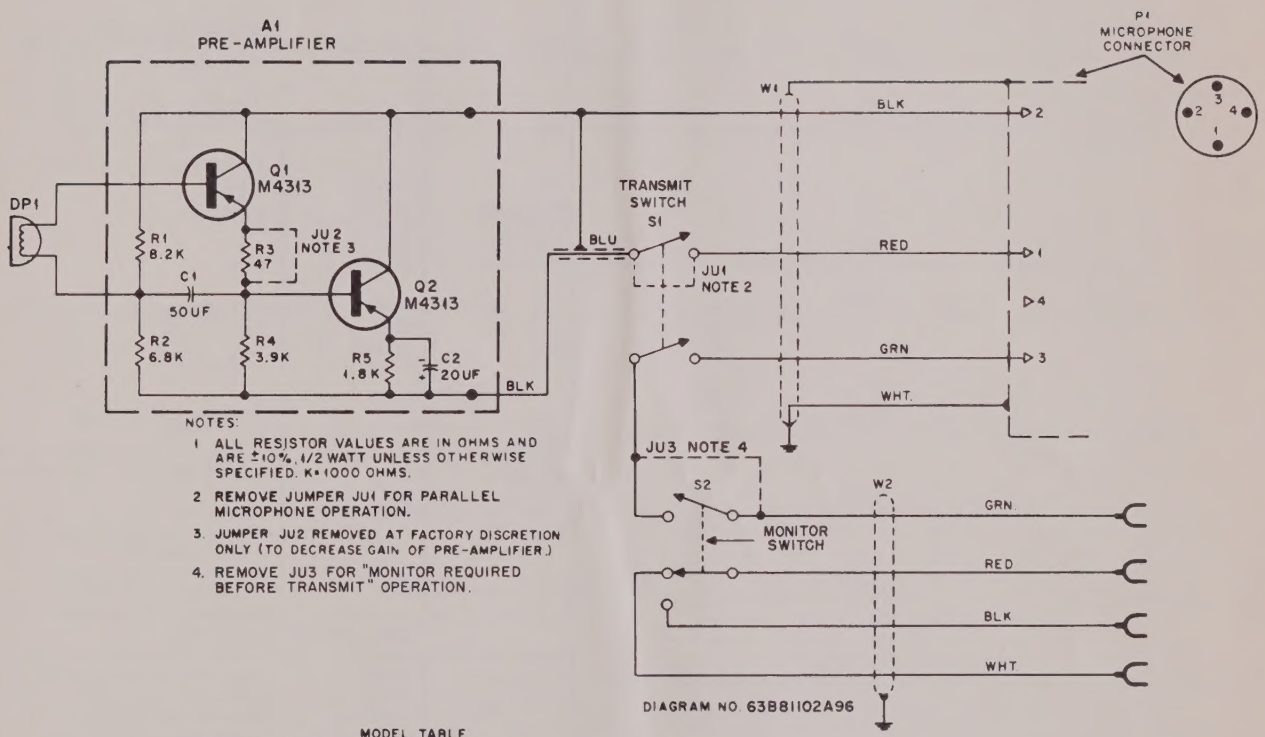
NOTE

These connections have been incorporated at the factory for the T1204A and T1207A Consoles.

Refer to the "Private-Line" Disabling paragraph and the associated diagram of the appropriate remote control console instruction manual for more detailed information concerning these connections.



(TERMINAL BRACKET ASSEMBLY DIAGRAM)



NOTES:

1. ALL RESISTOR VALUES ARE IN OHMS AND ARE ±10%, 1/2 WATT UNLESS OTHERWISE SPECIFIED. K=1000 OHMS.
2. REMOVE JUMPER JU1 FOR PARALLEL MICROPHONE OPERATION.
3. JUMPER JU2 REMOVED AT FACTORY DISCRETION ONLY (TO DECREASE GAIN OF PRE-AMPLIFIER.)
4. REMOVE JU3 FOR "MONITOR REQUIRED BEFORE TRANSMIT" OPERATION.

MODEL TABLE

MODEL	SUFFIX	DESCRIPTION
TMN6016A		DYNAMIC MICROPHONE WITH TRANSISTORIZED PRE-AMPLIFIER

PREVIOUS REVISIONS LISTED ON BACK OF THIS DIAGRAM →

TMN6016A Transistorized Dynamic Microphone
Schematic Diagram
Motorola No. 63B81102A96-O1
5/22/62-UM

REVISIONS

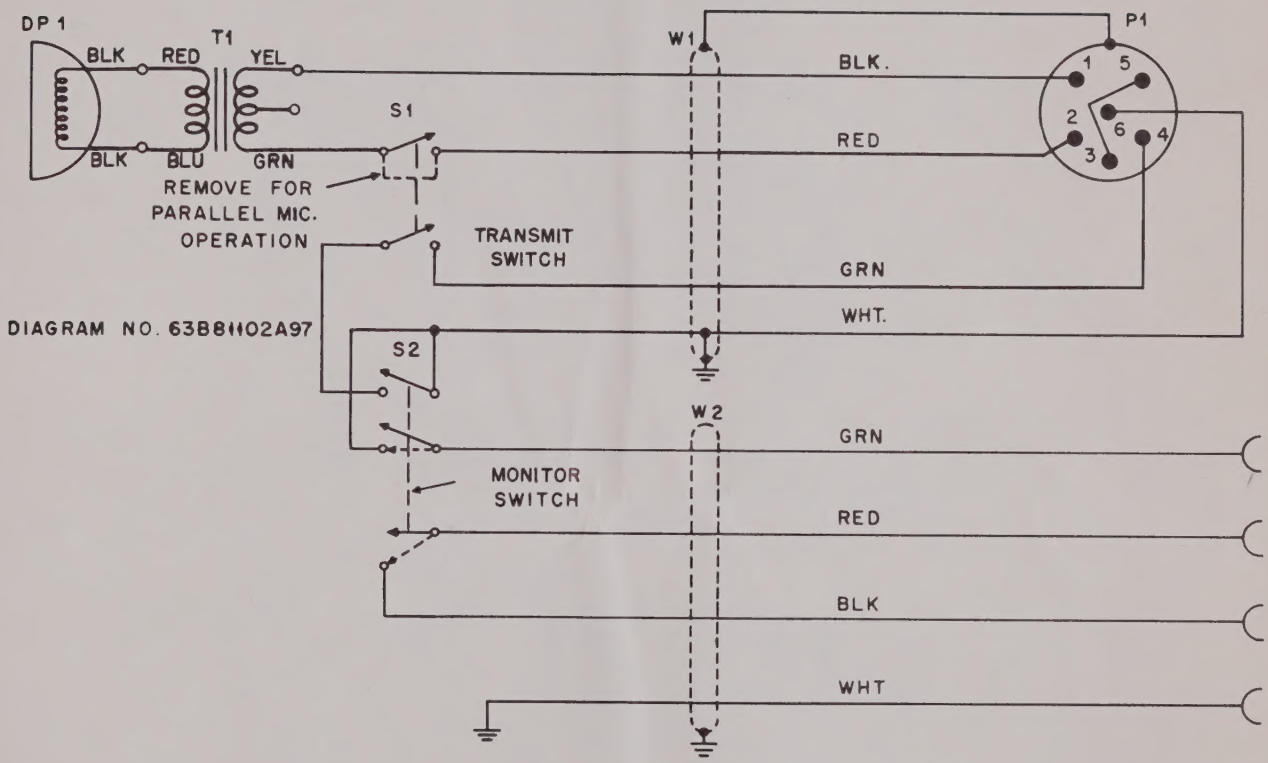
DIAG. ISSUE	CHASSIS AND SUFFIX NO.	REF. SYMBOL	CHANGE	LOCATION
O1		S1	TRANSMIT WAS PUSH-TO-TALK	
		S2	MONITOR WAS PL DISABLING	

PARTS LIST for Schematic Diagram 63B81102A96-O1

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
		PREAMPLIFIER:
A1	1V80705A81	assy; incl ref. parts C1, 2, Q1, 2, R1, 2, 3, 4, 5 and 1V80705A82 BOARD, circuit; eyeleted
		CAPACITOR, fixed:
C1	23C82601A05	50 uf +150-10%; 25 v
C2	23C82601A03	20 uf +100-10%; 25 v
		CARTRIDGE, microphone:
DP1	59C852603	dynamic; 175 ohm imped. at 1 kc
		CONNECTOR, plug:
P1	28K847092	male; 4 contact; incl. metal connector shell; p/o W1
		TRANSISTOR: (SEE NOTE)
Q1, 2	48A124313	P-N-P; type M4313
		RESISTOR, fixed: ±10%; 1/2 w
R1	6R2004	8.2K
R2	6R6428	6.8K
R3	6R5550	47
R4	6R5659	3.9K
R5	6R2089	1.8K
		SWITCH, push:
S1	40C82424B01	single stack; 2 form "A"
S2	40C82424B02	single stack; 1 form "A"; 1 form "C"
		CABLE, microphone:
W1	1V855257	assy; incl: 30A800972 CABLE, microphone: 4 cond; shielded; 7 ft. req'd. Ref. part P1
W2	1V855256	assy; incl: 30A800972 CABLE, microphone: 4 cond; shielded; 9 ft. req'd. 29B847854 LUG, soldering: slotted tongue: 4 req'd.
		NON-REFERENCED ITEMS
	15C867980	HOUSING, microphone: rear
	15D852566	HOUSING, microphone: front
	13B852703	GRILLE, microphone: perforated metal
	35A852701	CLOTH, grille
	32B852702	GASKET, microphone
	7D867982	STAND, microphone
	47B867837	PIPE, microphone support
	41A855004	SPRING, pushbutton retractor; 2 req'd.
	64B855001	COVER, bottom
	46B854311	STUD, tri-mount: 4 req'd.
	75A838826	FOOT, rubber: 4 req'd.
	14A861196	INSULATOR, transistor; 2 req'd.
	42A852705	CLAMP, cartridge
	14A857137	INSULATOR, cartridge
	42A855002	CLAMP, cable
	38B855009	BUTTON, push (Transmit)
	38K855010	BUTTON, push (Monitor)
	1V844635	TERMINAL BRACKET ASSY. includes: 7A844631 BRACKET, terminal 4K691205 WASHER, shoulder 4K51143 WASHER, fibre 6R2075 RESISTOR, fixed: 12K ±5%; 1/2 w; 2 req'd. 2S7002 NUT, hex: #6-32 x 5/16"; 2 req'd. 3S7363 SCREW, machine: #6-32 x 1/2"

NOTE:

Replacement transistors must be ordered by Motorola part number only for optimum performance.



MODEL TABLE

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PREVIOUS REVISIONS LISTED
ON BACK OF THIS DIAGRAM →

TMN6017A Dynamic Microphone
Schematic Diagram
Motorola No. 63B81102A97-O1
5/22/62-UM

REVISIONS

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REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
		CARTRIDGE, microphone:
DP1	59C852603	dynamic; 175 ohm imped. at 1 kc
		CONNECTOR, plug:
P1	28A881072	male; 6 contact; incl. metal connector shell; p/o W1
		SWITCH, push:
S1	40B852735	contact arrangement; 2 form A
S2	40C82597D01	contact arrangement; 1 form A and 1 form C
		TRANSFORMER, AF:
T1	1V859370	assy; riveted; incl. 25C855849 TRANSFORMER, AF 7A859371 BRACKET, mounting 31R128031 STRIP, terminal
		CABLE, microphone:
W1	1V855201	assy; incl: 30A800972 CABLE, microphone; 4 cond. shielded 7 ft. req'd. Ref. part P1
W2	1V855256	assy; incl: 30A800972 CABLE, microphone; 4 cond. shielded; 9 ft. req'd. 29B847854 LUG, soldering: slotted tongue; 4 req'd.
NON-REFERENCED PARTS LIST		
	15C867980	HOUSING, microphone: rear
	15C852566	HOUSING, microphone: front
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